

QY 898 SPARLAYQDKGVLHNEVKVSIWRGLPNVVTSAISLPNIRKPDGYDYYAFSKDQYYNIDV 957
 |||||
 Db. 1321 SPARLAYQDKGVLHNEVKVSIWRGLPNVVTSAISLPNIRKPDGYDYYAFSKDQYYNIDV 1380
 |||||
 QY 958 PSRTARAITTSGQTLSKVWYNCP 981
 |||||
 Db. 1381 PSRTARAITTSGQTLSKVWYNCP 1404

RESULT 7
 AAB29773

ID AAB29773 standard; protein; 1404 AA.

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AC AAB29773;

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DT 15-JUN-2007 (revised)

DT 28-FEB-2001 (first entry)

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DE Human megakaryocyte stimulating factor (MSF), SEQ ID NO:1.

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KW Human MSF; megakaryocyte stimulating factor; tribonectin; alternative splicing; joint boundary lubricant; O-linked oligosaccharide; osteoarthritis; tribosupplementation; tissue adhesion inhibition; friction coefficient reduction; gene therapy; antiarthritic; osteopathic; BOND_PC; megakaryocyte stimulating factor; MSF; megakaryocyte stimulating factor MSF [Homo sapiens]; G05203; G05615; G08283.

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OS Homo sapiens.

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PN WO200064930-A2.

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PD 02-NOV-2000.

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PF 24-APR-2000; 2000WO-US010953.

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PR 23-APR-1999; 99US-00298970.

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PA (RHOD-) RHODE ISLAND HOSPITAL LIFESPAN PARTNER.

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PI Jay GD;

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DR WPI; 2001-024673/03.

DR N-PSDB; AAC81498.

DR PC:NCBI; gi1572721.

DR PC:SWISSPROT; Q92954.

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PT Novel tribonectin polypeptide useful as lubricant for treating

osteoarthritis, comprises O-linked lubricating moiety.

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PS Claim 3; Page 7; 47pp; English.

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CC The invention relates to a human tribonectin which is a product of alternative splicing of the human MSF (megakaryocyte stimulating factor) gene. The tribonectin has at least one O-linked oligosaccharide lubricating moiety and has a polypeptide sequence comprising 1-76 repeats of a motif having at least 50% identity to the sequence KEPAPTT (AAB29774). The invention also relates to a nucleic acid encoding a human MSF-derived tribonectin; a biocompatible composition comprising a human tribonectin for inhibiting tissue adhesion formation; and a method of diagnosing osteoarthritis or a predisposition to osteoarthritis by measuring the amount of MSF or its fragment in a biological sample of a mammal, wherein an increased amount of MSF compared to a control indicates the presence of or predisposition to developing osteoarthritis. The tribonectin and DNA encoding it are useful in the treatment of osteoarthritis, where they may be used for lubricating mammalian joints, such as articulating joints of humans, dogs or horses. The tribonectin, when formulated as a membrane, foam, gel or fibre, is useful for inhibiting adhesion between two surfaces such as the injured tissues of a mammal, where the injury is caused by a surgical insertion or trauma, or an artificial device e.g., an orthopaedic implant. In particular, one of the surfaces is pericardial tissue. DNA encoding a tribonectin may be used in gene therapy. The present sequence represents human MSF

CC Revised record issued on 15-JUN-2007 : Enhanced with precomputed information from BOND.

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SQ Sequence 1404 AA;

Query Match 95.8%; Score 4991.5; DB 4; Length 1404;
 Best Local Similarity 69.9%; Pred. No. 3.7e-252;
 Matches 981; Conservative 0; Mismatches 0; Indels 423; Gaps 1;

Qy 1 MAWKTLPYLLLLLSVFPVIQQVSSQDLSSCAGRCGEGYSRDATA NCNDYNCQHYMECCPDF 60
 |||||
 Db. 1 MAWKTLPYLLLLLSVFPVIQQVSSQDLSSCAGRCGEGYSRDATA NCNDYNCQHYMECCPDF 60

Qy 61 KRVCTAELSCKGRCFESFERGRECD CDAQCKKYDKCCPDYESFCAEVHNPTSPPSSKKAP 120
 |||||
 Db. 61 KRVCTAELSCKGRCFESFERGRECD CDAQCKKYDKCCPDYESFCAEVHNPTSPPSSKKAP 120

Qy 121 PPSGASQTIKSTTKRSPKPPNKKKKVIESEEITEEHSVSENQESSSSSSSSSSSTIW 180
 |||||
 Db. 121 PPSGASQTIKSTTKRSPKPPNKKKKVIESEEITEEHSVSENQESSSSSSSSSSSTIW 180

Qy 181 KIKSSKNSAANRELQKKLKVKDNKKNRTKKPTPKPPVVDEAGSGLDNGDPKVTPDTST 240

please scan

search notes

Db 181 KIKSSKNSAANRELQKLLKVKDNKKNRKTAKPKPQVDEAGSGLDNGDFKVTTPTDST 240
 Qy 241 TQHNKVSTSPKITTAKPINPRPSLPPNSDTSKETSLTVNKETTVETKETTTTNQQTSDG 300
 Db 241 TQHNKVSTSPKITTAKPINPRPSLPPNSDTSKETSLTVNKETTVETKETTTTNQQTSDG 300
 Qy 301 KEKTTSAKETQSIEKTSAKDLAPTSKVLAKPTPKAETTTKGPALTTPKEPTPTPKEPAS 360
 Db 301 KEKTTSAKETQSIEKTSAKDLAPTSKVLAKPTPKAETTTKGPALTTPKEPTPTPKEPAS 360
 Qy 361 TTPKEPTPTTIKSAPTPKEPAPTTKSAAPTPKEPAPTTKAPTTKEPAPTTKEPAPTTKEP 417
 Db 361 TTPKEPTPTTIKSAPTPKEPAPTTKSAAPTPKEPAPTTKAPTTKEPAPTTKEPAPTTKEP 420
 Qy 418 ----- 417
 Db 421 APPTTKSAPTPKEPAPTPKKPAPTPKEPAPTTPKEPTPTPKEAPPTTKEPAPTTPK 480
 Qy 418 ----- 417
 Db 481 EPAPTAKKPAPTPKEPAPTTPKEAPPTTKEPSPTPKEAPPTTKSAPTTKEPAPT 540
 Qy 418 ----- 417
 Db 541 TTKSAPTPKEPSPTTKEPAPTPKEPAPTTPKKAPPTPKEAPPTTKEPAPTTKKP 600
 Qy 418 ----- 417
 Db 601 APAPKEPAPTPKETAPTPKKLPTTPEKLAPEKAPTTPEELAPTTPEEPTPTT 660
 Qy 418 ----- 417
 Db 661 PEEPAPTPKAAAPNTPKEPAPTPKEPAPTTPKETAPTPKGATPTLKEP 720
 Qy 418 ----- 417
 Db 721 APPTPKKAPKELAPTTKEPTSTSDKPAAPTPKGATPTPKEAPPTPKEAPPTPKG 780
 Qy 418 ----- 417
 Db 781 TAPPTLKEPAPTPKKAPKELAPTTKGPTSTSDKPAAPTPKETAPTPKEPAPTPK 840
 Qy 418 KAPAPTPETPPPTTSEVSTPTTKEPTTIHKSPDESTPELSAEPTPKALENSPKEPGVPT 477
 Db 841 KAPAPTPETPPPTTSEVSTPTTKEPTTIHKSPDESTPELSAEPTPKALENSPKEPGVPT 900
 Qy 478 TKTPAATKPEMTTAKDKTTERDLRTTPETTTAAPKMTKETATTTEKTTESKITATTQV 537
 Db 901 TKTPAATKPEMTTAKDKTTERDLRTTPETTTAAPKMTKETATTTEKTTESKITATTQV 960
 Qy 538 TSTTQDTPFKITTLKTTTLPKVTTKKITTTTEIMNKPEETAKPKDRATNSKATTPK 597
 Db 961 TSTTQDTPFKITTLKTTTLPKVTTKKITTTTEIMNKPEETAKPKDRATNSKATTPK 1020
 Qy 598 PQKPTKAPKKPTSTKKPKTMPrVRKPKTTPRKMSTMPPELNPTSRIAEEAMLQTTTRPN 657
 Db 1021 PQKPTKAPKKPTSTKKPKTMPrVRKPKTTPRKMSTMPPELNPTSRIAEEAMLQTTTRPN 1080
 Qy 658 QTPNSKLVEVNPKSEDAGGAEGETPHMLLRPHVFMPPEVTPDMDYLPRVPNQIIINPMLS 717
 Db 1081 QTPNSKLVEVNPKSEDAGGAEGETPHMLLRPHVFMPPEVTPDMDYLPRVPNQIIINPMLS 1140
 Qy 718 DETNICNGKPVGDLTTLRNGTLVAFRGHYFWMLSPFSPPSPARRITEVGIPSPIDTVFT 777
 Db 1141 DETNICNGKPVGDLTTLRNGTLVAFRGHYFWMLSPFSPPSPARRITEVGIPSPIDTVFT 1200
 Qy 778 RCNCEGKTFPPKDSQYWRFTNDIKDAGYPKPIFKGFGGLTGQIVAALSTAKYKNWPESYV 837
 Db 1201 RCNCEGKTFPPKDSQYWRFTNDIKDAGYPKPIFKGFGGLTGQIVAALSTAKYKNWPESYV 1260
 Qy 838 FFKRGGSIQQYIYKQEPVQKCPGRRPALNYPVYGEMTQVRRRRFERAIGPSQTHTIRIQQ 897
 Db 1261 FFKRGGSIQQYIYKQEPVQKCPGRRPALNYPVYGEMTQVRRRRFERAIGPSQTHTIRIQQ 1320
 Qy 898 SPARLAYQDKGVVLHNEVKVSIILWRGLPNVVTSAISLPNIRKPQDGYDYYAFSKDQYYNIDV 957
 Db 1321 SPARLAYQDKGVVLHNEVKVSIILWRGLPNVVTSAISLPNIRKPQDGYDYYAFSKDQYYNIDV 1380
 Qy 958 PSRTARAITTRSGQTLSKVWYNCP 981
 Db 1381 PSRTARAITTRSGQTLSKVWYNCP 1404

RESULT 8
 AAB60568
 ID AAB60568 standard; protein; 1404 AA.
 XX
 AC AAB60568;
 XX
 DT 15-JUN-2007 (revised)
 DT 27-APR-2001 (first entry)
 XX
 DE Human megakaryocyte stimulating factor (MSF, CACP).
 XX
 KW Human; CACP protein; camptodactyly-arthropathy-coxa vara-pericarditis;
 KW MSF; megakaryocyte stimulating factor; synovial lubricant;